

**Notice of Allowability**

Application No.

09/653,782

Examiner

Charles Chow

Applicant(s)

MARSHALL ET AL.

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/5/2006.
2. ☒ The allowed claim(s) is/are 8,10 and 11.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

### Detailed Action

1. This office action is for the RCE filed on 10/05/2006.

### Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance:

Claims 8, 10-11 are allowable over the prior art of record. The prior arts fail to teach the allowable features, singly, particularly, or in combination, which has effective filing date with priority date of 09/02/1999.

Applicant has canceled the rejected claims 1-5 & retained the allowable claims 8, 10-11 which was mailed in the final office action dated 4/5/2006.

The prior arts fail to teach the allowable features in a receiver having the microprocessor coupled to the signal quality indicator circuit and the decoder circuit, together with the following features:

wherein the microprocessor is operable to energize and de-energized the receiver circuit; determining the presence of a carrier with a carrier detect false rate, based, at least in part, on the power of the channel, and to **determine an acceptable signal quality with a signal quality false rate, based, at least in part, on an output of the signal quality indicator circuit; and**

wherein the microprocessor is operable to energize the receiver circuit for a first period of time, and if the carrier is determined to be present, to then maintain the receiver in the energized state until a determination is made as to whether acceptable signal quality has been obtained, and to de-energize the receiver substantially immediately without waiting for expiration of any time period if the carrier is determined to be present and the signal quality is not acceptable [independent claim 8].

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The dependent claims 10-11 are also allowable due to their dependency upon the independent claim 8 and comprising additional claimed features associated to the features of the independent claims.

The closest prior art **Maru (US 4,977,611)** teaches the detecting circuit 60 is responsive to the signal strength of the electric fields which may be developed on the respective channels [col. 1, lines 58-66 &] for de-energizing the receiver, during battery-save scanning, to powering off receiver immediately at time t7 when no carrier data from A/D 62 is found on channels 323-343, Fig. 5A/5B & col. 4, lines 54-63],

but failed to teach the microprocessor coupled to the signal quality indicator circuit and the decoder circuit; the determining the presence of a carrier with a carrier detect false rate, based, at least in part, on the power of the channel; the **determining an acceptable signal quality with a signal quality false rate**, based, at least in part, on an output of the signal quality indicator circuit; the **maintaining the receiver in the energized state until a determination is made as to whether acceptable signal quality has been obtained, and to de-energize the receiver substantially immediately** without waiting for expiration of any time period **if the carrier is determined to be present and the signal quality is not acceptable**.

**Lee (US 5,369,798)** teaches the detecting of the largest RSS Is [abstract], the accessing the quality failure counts for 10 failure counts [step 115], then to turn off phone in step 116 [ Fig. 4 & in col. 2, lines 3-5]; the processor resumes normal operating to demodulating overhead message [col. 1, lines 51-57], in order to reliably controlling of the battery power saving during abrupt RSSI changes [col. 1, lines 35-40], but also fail to teach the allowable features which Maru fails to teach.

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Other prior arts in below were also considered, but they fail to teach the above allowable features.

**Besharat et al. (US 6,219,540 B1)** teaches the quality detector 154 for detecting out-of-range, in-range, for generating power supply control signal to disable the power to receiver 104 when out of range is detected [ col. 2, line 63 to col. 3, line 17; col. 9, lines 21-36 and col. 10, lines 16-19], the maintaining power supply to receiver 104 to enable in-range detection signal transmission, col. 2, line 6 to col. 3, line 17].

**Deluca et al. (US 5,144,296)** teaches the generating a quality indication signal based on the predetermined carrier-to-noise ratio, such as +6 dB [ col. 7, col. 32-37, Fig. 2], the conserving power supply for the receiver [steps 618, Fig. 6], when either the received bit is not the self address bit [step 616] or when maximum error counts occurs [steps 626].

Other prior arts are also considered but fail to teach the above allowable features. They are: **Ichikawa et al. (US 4,506,386)**, **Mizoguchi et al. (US 5,566,364)**, **Ivas (US 3,906,150)**, **Fujimoto (US 6,263,200 B1)**.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

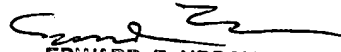
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles C. Chow whose telephone number is (571) 272-7889. The examiner can normally be reached on 8:00am-5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or

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proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles Chow C.C.

October 16, 2006.

  
EDWARD E. UCRAN  
SUPERVISOR, PATENT EXAMINER  
TECHNOLOGY CENTER